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October 11, 2002

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Memorandum of **Ex** Parte Presentation

OCT 11 2002

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

Re: CC Docket No. 01-338, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers;  
CC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; and  
CC Docket No. 98-147, Deployment of Wireline Services Offering Advanced Telecommunications Capability

Dear Ms. Dortch:




On October 9, 2002, Don Cain, John Berringer, **Gary** Phillips, Jim Lamoureux, David Smith, Chris Boyer and the undersigned representing SBC Communications, Inc. (SBC), met with Tom Navin, Rob Tanner, Brent Olson, Mike Engel, Ian Dillner, Aaron Goldberger and Jeremy Miller of the Competition Policy Division of the Wireline Competition Bureau and Jerry Stanshine and Shanti Gupta of the Network Telecommunications Division of the Office of Engineering and Technology.

The purpose of the meeting was to discuss the hot cut process. The attached material was discussed during the course of the meeting. This letter transmits one copy containing confidential information and two copies redacted for public inspection.

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Please contact the undersigned at (202) 326-8817 should you have any questions.

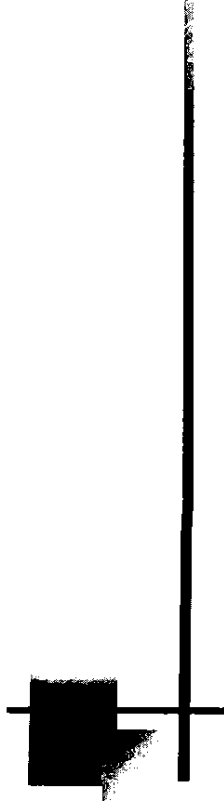
Sincerely.



Attachment

cc: Rob Tanner (w/o attachment)  
Brent Olson (w/o attachment)  
Jeremy Miller (w/o attachment)  
Jerry Stanshine (w/o attachment)  
Shanti Gupta (w/o attachment)  
Tom Navin (w/o attachment)  
Mike Engel (w/o attachment)  
Ian Dillner (w/o attachment)  
Aaron Goldberger (w/o attachment)

# CRC Hot Cuts



ORIGINAL

October 9, 2002



# Overview

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- SBC provisions hot cut orders on a timely basis, with minimal disruption to end users.
- Moving forward, SBC has the capacity to meet any reasonably foreseeable increase in demand for stand alone unbundled loops at the same superior level of performance.
- SBC's proven Hot Cut record facilitates use of competitive switching.
- Cost is not an impediment



# Proven Performance

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- SBC has a proven record of performance as FCC has found in 271 proceedings and as evidenced by data filed in this proceeding.



# Cost is not a barrier

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- In CA SBC calculated a weighted average charge for cutovers performed Jan-Sept 2002 (both FDT and CHC cutovers)
- The calculated weighted average charge for was less than \$30.00



# Hot Cut Methods

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- SBC offers two alternatives for the provisioning of unbundled "hot cut" loops:
  - Coordinated Hot Cut (CHC) process.
    - Communication between CLEC & SBC during the process.
    - CLEC initiates start of cutover process.
    - SBC confirms completion of cutover with CLEC.
  - Frame due time (FDT) process.
    - Designated time agreed to by CLEC and SBC.
    - Clock initiates start of cutover process
    - No cutover charge



# Local Operation Processes

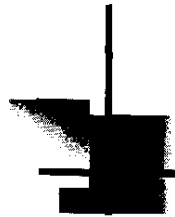
- Process service requests that require manual intervention.
- Review CHC/FDT service orders prior to conversion.
- Coordinate resolution on problem orders.
- Coordinate communication between CLEC and SBC Network personnel on CHC conversions.



# Central Office Process

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- Central office technician manually disconnects an active loop that was connected to an SBC switch; reconnects at a cross-connect point that receives dial tone from the CLEC switch.
- This process is basic, fundamental work that is performed on a daily basis in COs throughout SBC's region.
- There are in place today millions of operational cross connects – every one of which was placed by CO technicians in the regular course of their job responsibilities.
- Over 500,000 CHC/FDT unbundled loops have been provisioned, using these processes (June 2001 – May 2002).



# SBC Hot Cut Performance


- Proven historical response to changes/spikes in Hot Cut volumes within LOC/LSC staffing.
- Established incentives to respond to volume changes.
- Superior historical results for Hot Cuts support SBC's position that the LOC/LSC can handle reasonably foreseeable increase in demand.



# Increase in Current Unbundled Loop Demand – LOC/LSC Responses

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- Utilize sophisticated force models to determine staffing requirements.
- Overtime
- Reallocation of resources from other product offerings.
- Hire and train additional personnel if needed.



# Increase in Current Unbundled Loop Demand – Central Office Response

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- SBC maintains flexibility with regard to staffing, making adjustments and reallocations of work force among central offices as necessary to support changes and/or spikes in work load volumes and staffing requirements.
- SBC can accommodate increases in hot cut activity in individual COs as well as on a regional basis.
- SBC has abundant experience in handling spikes in demand at individual COs, and is easily capable of accommodating those spikes, provided it receives adequate notice.
- Any reasonably foreseeable increase in hot cut demand that would result from the elimination of switching from the UNE list, would be easily accommodated by SBC's Central Offices.



# SBC CO Flexibility

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- During the 12 month period of June 1, 2001 through May 31, 2002 (Berringer-Smith Declaration, Par 36 & 38):
  - **AIT** required 38 FTE (Full Time Equivalent) CO technicians (out of a CO technician work force of 3,191) to provision 210,412 hot cut loops.
  - **SWBT** required 22 FTE CO technicians (out of a CO technician work force of 2,752) to provision the 79,378 CHC/FDT loops.
  - **PB** required 29 FTE CO technicians (out of a CO technician work force of 1,093) to provision approximately 282,123 hot cut loops.
- As these numbers indicate, a small portion of SBC Central Office workforce is involved in the hot cut process. This allows SBC to allocate additional resources, as needed, to meet any spike in demand.

# Accommodate Increase – Using Overtime



- Analysis indicates that to work the inventory of UNE-P lines received during the June 2001 – May 2002 and assume that those volumes would instead be ordered as CHC/FDT loops, the AIT region would have been able to work the 1,043,096 loops utilizing the current CO technician workforce with less than 6% (a little more than 2 hours per technician per week) overtime during this period.

# Accommodate Increase – Using Overtime and Reallocation.

- Any dramatic increase in hot cut orders can readily be handled.
- Redford-Detroit has the highest concentration of UNE-P lines in the AIT region going from 3,417 to 14,083 UNE-P loops – 312% increase June 2001 through May 2002.
- If those same UNE-P lines had instead been ordered as CHC/FDT loops, installation would have required approximately 2 additional FTE CO technicians to handle the work load. This office is staffed by 6-8 technicians, approximately a 20-30% increase.
- Given the 3191 CO technician base in the AIT region, such an increase most likely would have been accommodated through force reallocation.

# I SBC Experience in Handling "Spikes" in Volume



- SBC regularly experiences spikes in ordering activity at the start and end of the school year, as families and college students establish and disconnect telephone service as they move in and out of town.
- For example, during a three to four week period last fall, as the University of Michigan at Ann Arbor school year began, the Ann Arbor Main CO saw an increase in the regular work load of from approximately 150 retail orders for new service per day to 800 per day (a growth of about 433%).
- Staffing increased from 8 CO technicians to 15 technicians, all of whom worked overtime and staggered shifts to handle volumes in a timely manner, enabling Ameritech to satisfy its due date commitments.



# Project Managed Hot Cuts

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- No functional difference from non-project managed hot cuts.
- No factual basis to differentiate between project and non-project hot cuts.



# SBC Commitment

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- SBC's long-standing processes and procedures for the scaling of its resources to handle both sustained increases in volumes, as well as unanticipated spikes in those volumes, are designed to ensure that quality standards will continue to be met as the level of facilities based competition increases.



# Conclusion

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- Results are great
- Process is sound
- Process is scalable
- Cost is no impediment



**AT&T's Scheme to Completely Transform the  
National Circuit Switched Wireline Network  
into an All-ATM Packet Network**

**ELP- Separating Fact from Fiction**

**October 9, 2002**

# Fundamental Misconceptions

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- **Despite its benign sounding name ELP is a radical transformation of the entire circuit switched network.**
  - Involves complete re-design of existing ILEC networks and extensive deployment of new, unnecessary equipment.
- **AT&T falsely portrays ELP as some form of software upgrade.**
  - Reality is that ELP involves a massive deployment of new equipment that would require the re-termination of millions of access lines.
  - Similar to an “enhanced” version of Project Pronto with sufficient capacity to accommodate every line in SBC’s network.
  - Capital required to transform the circuit switched network into an all-ATM network would be tens of billions of dollars (at a minimum).

# Conclusions

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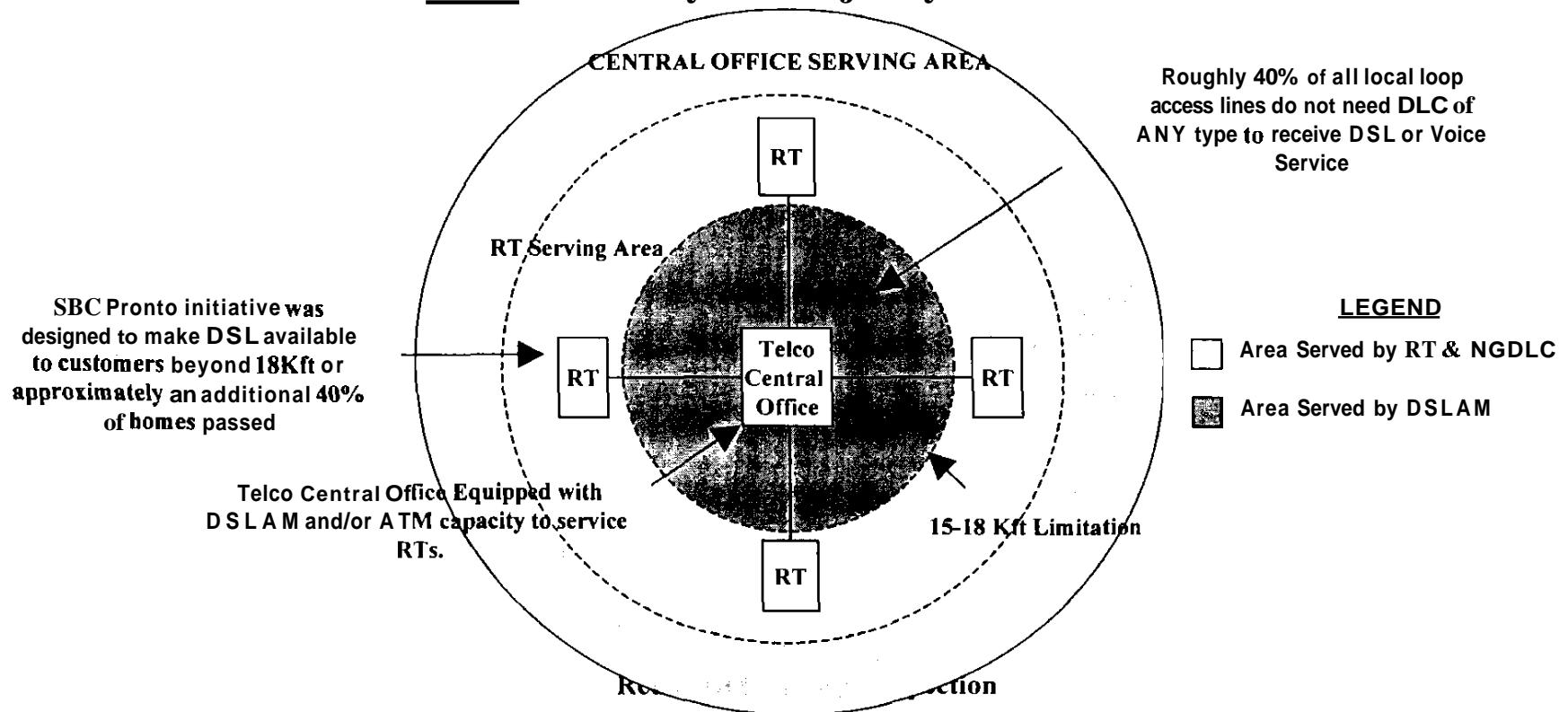


- AT&T's premise is flawed: Hot-Cut procedures are efficient.
- AT&T is asking the Commission to dictate wireline technology.
- ELP would lead to significant network alterations driving enormous cost and could result in substantial consumer surcharges.
- ELP is not compatible with present day ILEC networks and packetized voice is still in the developmental stages.
- There is no certainty that packetized voice is ready for such a large scale forced deployment.
- It is debatable whether ELP would provide any more efficient process to change carriers than the process that exists today.
- ELP would place a large financial burden upon ILECs that cannot be sustained.
- ELP is fundamentally an end-run on broadband regulation designed to preserve UNE-P and effectively create a new "UNE-P" for broadband.



# Existing hot-cut process works

- AT&T wrongly asserts that the hot-cut process is inefficient & does not promote competition.
  - Hot Cut process is reliable and allows meaningful opportunities to compete.
  - SBC estimates it has used the hot cut procedures to provision over a half million loops in a one year period (June 1,2001 - May 31,2002).
- Additional DLC is NOT necessary for majority of ILEC Network.



# AT&T is asking the FCC to dictate wireline technology



- In the end AT&T is asking the FCC to engineer and dictate wireline technology.
  - This is totally inappropriate given the rapidly changing pace of technology and competition.
- AT&T's proposal requires packetization of every voice loop in ILEC networks.
  - Leads to massive network capital, systems and expense impacts.
  - Requires ILECs to invest tens of billions of dollars to packetize 100% of voice loops.
- Proposed AT&T network alterations are not incremental to current deployment.
  - SBC has no plans to deploy DLC for the purposes of packetizing voice in local loop.
  - Traditional DLC and NGDLC serve approximately 17% of SBC's 59M+ lines.
  - Neither platform could be updated to support AT&T's proposed architecture today.
  - If existing platforms could be updated, SBC in order to serve the remaining **83%** of access lines would have **to** deploy "tNGDLC" to nearly **49** million access lines.
  - Equates to roughly 10,000+ RT Sites, additional fiber facilities, additional central office terminating equipment etc.
- End result is that **ILECs** would have to deploy new "tNGDLC" as proposed by AT&T for all of their access lines in addition to other equipment necessary to convert the entire circuit switched wireline network into an all-ATM network.

# **AT&T's cost estimates are vastly understated**

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- **AT&T's assumptions regarding "ELP Basic" are incorrect.**
  - AT&T based their estimates on substituting "tNGDLC" in existing fiber feeder.
  - AT&T bases their proposal of \$1 13 per line upon a stated "25 to 50% range" of the existing ILEC network using existing penetrations of fiber and modem DLC.
  - Reality is that a majority of lines are not "fiber-fed", are not served via DLC or NGDLC and the bulk of existing DLC or NGDLC will not support AT&T's proposal.
- **AT&T's estimates for the provision of xDSL are equally inaccurate and misleading**
  - AT&T bases their added cost for "ADSL plus basic ELP" upon a 40% ADSL penetration.
  - Reality is that current ADSL penetration is approximately 5-7%.
- **AT&T estimates that hot cut expenditures could be as much as \$30 B while the cost to implement ELP is less.**
  - ELP itself would require re-terminating millions of access lines in the field on the newly deployed "tNGDLC" – which is a process very similar to the "hot cut" that would occur in the central office.
  - Requires the Commission to take on its face that the costs to do a hot cut, which involves no capital investment, are greater than the cost to implement ELP which involves massive capital investment.

# Realistic ILEC Network Costs



- **Conservatively ELP could cost SBC alone a minimum of \$29B-\$35B**
  - Approximate cost per line (Pronto Example) = **Redacted XXXX** End & includes:
    - NGDLC channel banks
    - combined ADSL/POTS cards
    - pro-rated OC3 transport facilities & electronics
    - element management system
    - ATM switching capacity and ATM transport
- **Cost could go much higher**
  - DLC build out in Tier II and III wire centers would be greater.
  - Migration Expense is NOT included (migrating and re-terminating nearly 50+M access lines).
  - Systems integration cost is not included.
- **AT&T CLAIMS that ILEC investments in NGDLC (such as SBC's Project Pronto) are similar to capital investment figures for ELP.**
  - SBC built its estimates upon its Project Pronto financial model and estimated its costs to be at a minimum \$29 B in capital for SBC.

# Financial implications

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- **ELP would have significant financial implications that the Commission cannot ignore.**
  - SBC capital expenditures for 2003 expected to range from \$5-6 billion.
  - Majority of this is necessary for the ongoing maintenance of SBC's network.
  - Conservative estimate is that ELP would cost SBC at a minimum \$30 billion in capital alone, not to mention expense.
  - Even if this is spread over a 10 year window, this equates to nearly \$3 billion annually dedicated to ELP or likely greater than 50% of SBC's current level of capital investment.
- **This will significantly cut into available capital that SBC would otherwise use for other purposes.**
- **The ILECs cannot sustain this burden.**

# ELP could create a new consumer surcharge



- **ELP could create consumer surcharge for unneeded network architecture**
  - Monthly surcharge likely to exceed \$9.17 per month for five years (Based on SBC Actual Experience).
  - **At** a minimum surcharge would be \$2.88 per month for five years (Based on AT&T Low Estimates).

	AT&T Example	SBC Conservative Estimate
Cost per line:		Redacted XXXXXXXX End
*AT&T Cost – Basic ELP	\$ 113.00	-
*AT&T Cost – ELP Plus ADSL	\$ 60.00	-
Total Cost Per Line	\$ 173.00	\$ 550.00
Depreciation Period	5 Years	5 Years
Annual Cost	\$ 34.60	\$ 110.00
Cost per Month/Surcharge	\$ 2.88	\$ 9.17

# Not ready for full scale deployment

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- **ELP NGDLC proposed by AT&T is still in the developmental stages.**
  - No certainty that packetized voice would not create service quality and reliability problems.
  - Technology needs to be tested and proven before ILECs can change their entire network to packet voice.
- **ELP fundamentally changes how services are provided today.**
  - NGDLC or DLC is simply not necessary to provide service over a majority of SBC's loops today.
  - ELP could require major system modifications and would completely change the manner in which POTS is provided today.
  - Systems integration for packet voice applications has just begun and has not been contemplated for across the board deployment.
  - AT&T's claims that ELP would drive a "secure, highly reliable, converged high bandwidth network" are not substantiated and given the technology is in its infancy cannot be guaranteed.
- **Would require CLECs to integrate their systems to provide unbundled loops via packetized facilities as opposed to existing, in-place processes.**
  - Would move the industry back to square one in terms of putting in place processes, procedures and interfaces to provide unbundled loops.

# **Debatable that ELP would provide any more efficient process**



- **Debatable whether ELP would provide a more efficient process to provide CLEC access to unbundled loops.**
  - Virtual cross-connects would still have to be created.
  - No certainty whether in the end this process to migrate service from one provider to another would be any more efficient than the existing hot cut process.
  - AT&T provides no evidence to support a contrary conclusion.
- **Taken literally ELP implementation would make obsolete the use of DSLAMs.**
  - Would require every existing DSL customer to migrate from existing copper facilities to ELP.
  - Impact upon several million customers.
- **ELP locks the ILECs and CLECs into ATM technology.**
  - Given the rapidly changing pace of technology locking providers into one technology is not prudent policy.
- **Perpetuates a copper based network.**
  - Eliminates the potential for ILECs to migrate to fiber-to-the-curb or fiber-to-the-home networks based upon all fiber loops.

# Operational Support Systems

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- **AT&T's OSS claims are false:**
  - AT&T claims that certain ILEC and CLEC OSSs would need to be enhanced to support ELP.
  - This is certainly true but understates the fact that virtually all of the ILEC network back office systems would be impacted.
  - AT&T claims that ILEC have already made many of these enhancements to support xDSL – implying that there would be little need to do additional modifications.
  - This is incorrect in that the modifications done specific to xDSL do not necessarily carry over for POTS.
- **Enhancements would take several years and drive significant cost.**
  - Timeframe for systems enhancements would be at least three years.
  - New systems would be deployed on an office-by-office basis as technology is introduced.
  - Estimated system enhancement cost upwards of \$25 Million per year.
- **Back end systems modifications increase operational complexity and add more potentials for failure in the ordering and provisioning processes.**

# ELP is an end-run on forced broadband access

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- AT&T portrays ELP as a panacea for the elimination of UNE-P – this is incorrect!
  - Other CLECs would still demand that the Commission mandate ILECs to provide UNE-P.
- The reality is that AT&T is using UNE-P as a means to create new access requirements to ILEC broadband networks.
  - AT&T's unified loop proposal.
  - In order to access ELP, CLECs would have to be provided the capability to interface with ILEC provided packet networks (e.g. the **ATM** network used in conjunction with ELP).
  - This end result would conveniently establish a precedent that CLECs be permitted to access ILEC broadband network architectures on an unbundled basis.
- ELP will lead to the same set of complex regulatory issues SBC has encountered in attempting to manage its Project Pronto network with CLECs today creating more regulatory uncertainty and confusion.
- Effectively creates the UNE-P of Broadband.

# Conclusions

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- **AT&T's** proposal is an unreasonable and untenable “Trojan Horse”
  - ELP is baseless theory aimed at justifying maintaining UNE-P obligations.
  - ELP is AT&T substitute for building their own broadband network.
- **AT&T** should **NOT** be allowed to mandate how ILEC must design its network, especially with flawed design concepts such as ELP.
- In reality **AT&T** is asking the Commission to mandate that ILECs build out a broadband network subsidizing **AT&T's** entry.
  - AT&T is requesting the Commission mandate ILECs to deploy a superior network capable of providing packet voice and DSL.
  - AT&T and/or the CLECs could deploy an equally robust network using their own facilities.
- Deployment of ELP would render useless over a hundred years of telecommunications infrastructure in terms of copper loops, frame terminations, switching equipment etc.
- The cost to implement ELP would be in tens of billions of dollars for SBC alone much less for the rest of the industry.

# HOT CUT FDT CHARGES PER LINE

STATE	1Line Per Order	2 Lines Per Order	3 Lines Per Order	4 Lines Per Order	8 Lines Per Order
<b>CA</b>					
Loop Connect per order	\$ 18.56	\$ 31.23	\$ 43.90	\$ 56.57	\$ 107.25
<b>Loop connect per line</b>	<b>\$ 18.56</b>	<b>\$ 15.62</b>	<b>\$ 14.63</b>	<b>\$ 14.14</b>	<b>\$ 13.41</b>
<b>IL</b>					
Loop connect per order	\$ 20.21	\$ 40.42	\$ 60.63	\$ 80.84	\$ 161.68
<b>Loop connect per line</b>	<b>\$ 20.21</b>	<b>\$ 20.21</b>	<b>\$ 20.21</b>	<b>\$ 20.21</b>	<b>\$ 20.21</b>
<b>MI</b>					
Loop connect per order	\$ 17.82	\$ 35.64	\$ 53.46	\$ 71.28	\$ 142.56
<b>Loop connect per line</b>	<b>\$ 17.82</b>	<b>\$ 17.82</b>	<b>\$ 17.82</b>	<b>\$ 17.82</b>	<b>\$ 17.82</b>
<b>OH</b>					
Loop connect per order	\$ 31.00	\$ 62.00	\$ 93.00	\$ 124.00	\$ 248.00
<b>Loop connect per line</b>	<b>\$ 31.00</b>	<b>\$ 31.00</b>	<b>\$ 31.00</b>	<b>\$ 31.00</b>	<b>\$ 31.00</b>
<b>TX</b>					
Loop Connect per order	\$ 15.03	\$ 21.25	\$ 27.47	\$ 33.69	\$ 58.57
Service Order	\$ 2.58	\$ 2.58	\$ 2.58	\$ 2.58	\$ 2.58
<b>Loop connect + service order per line</b>	<b>\$ 17.61</b>	<b>\$ 11.92</b>	<b>\$ 10.02</b>	<b>\$ 9.07</b>	<b>\$ 7.64</b>

# HOT CUT CHC CHARGES PER LINE

STATE	1Line Per Order	2 Lines Per Order	3 Lines Per Order	4 Lines Per Order	8 Lines Per Order
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## CA

GHC T&M + Loop connect  
per order

\$	73.04	\$	85.71	\$	134.70	\$	147.37	\$	198.05
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CHC (T&M)

\$	54.48	\$	54.48	\$	90.80	\$	90.80	\$	90.80
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Loop Connect

\$	18.56	\$	31.23	\$	43.90	\$	56.57	\$	107.25
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**CHC + Loop connect +  
service order per line**

\$	<b>73.04</b>	\$	<b>42.86</b>	\$	<b>44.90</b>	\$	<b>36.84</b>	\$	<b>24.76</b>
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## IL

Loop connect per order

\$	20.21	\$	40.42	\$	60.63	\$	80.84	\$	161.68
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**Loop connect per line**

\$	<b>20.21</b>	\$	<b>20.21</b>	\$	<b>20.21</b>	\$	<b>20.21</b>	\$	<b>20.21</b>
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## MI

Loop connect per order

\$	17.82	\$	35.64	\$	53.46	\$	71.28	\$	142.56
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**Loop connect per line**

\$	<b>17.82</b>	\$	<b>17.82</b>	\$	<b>17.82</b>	\$	<b>17.82</b>	\$	<b>17.82</b>
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## OH\*\*

Loop connect per order

\$	31.00	\$	62.00	\$	93.00	\$	124.00	\$	248.00
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**Loop connect per line**

\$	<b>31.00</b>	\$	<b>31.00</b>	\$	<b>31.00</b>	\$	<b>31.00</b>	\$	<b>31.00</b>
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## TX

CHC T&M + Loop connect  
+ service order per order

\$	103.37	\$	152.47	\$	158.69	\$	164.91	\$	232.67
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CHC (T&M)

\$	85.76	\$	128.64	\$	128.64	\$	128.64	\$	171.52
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Loop Connect

\$	15.03	\$	21.25	\$	27.47	\$	33.69	\$	56.57
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Service Order

\$	2.58	\$	2.58	\$	2.58	\$	2.58	\$	2.58
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**CHC + Loop connect +  
service order per line**

\$	<b>103.37</b>	\$	<b>76.24</b>	\$	<b>52.90</b>	\$	<b>41.23</b>	\$	<b>29.08</b>
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